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Biomass gasifier crematorium at Woraiyur to be opened soon

The city already has two biomass gasifier crematorium in Oyamari and Karumandapam. The crematorium in Woraiyur would cater to the needs of the ever increasing population in the city.

<http://timesofindia.indiatimes.com/city/trichy/Biomass-gasifier-crematorium-at-Woraiyur-to-be-opened-soon/articleshow/47713638.cms>

Policy Initiatives

Government to use 20% diesel requirements through bio-diesel

The Union Shipping Ministry has decided to utilise 20% of its diesel requirement through bio-diesel at 12 major ports. Union Minister for Road Transport and Highways and Shipping after inaugurating country's first bio-diesel dispensing machine at Haldia Port said that the Bureau of Indian Standards has been asked to set standards for higher usage of bio-diesels in automobiles, locomotives, heavy engineering machines and generators.

Emami Agrotech Ltd, which has its bio-diesel refinery located at Haldia will supply the alternative green fuel to Haldia Port. The Minister said that the bio-diesel produced by palm oil residue by Emami was cost effective. "We are looking at the possibility of buying bio-diesel for all major ports at a price much lower than the petroleum diesel price", he said. The Minister indicated that the price could be as low as Rs. 10 a litre.

<http://www.thehindubusinessline.com/news/govt-to-use-20-diesel-requirements-through-biodiesel/article7350135.ece>

Centre to release standards for higher bio-diesel usage in 2 months

The Shipping Ministry – Mr. Gadkari said that there is standard defined for 20% of mixing but they will come out with standards in the next two months for higher utilisation of bio-diesel in vehicles.

<http://www.dnaindia.com/money/report-centre-to-release-standards-for-higher-bio-diesel-usage-in-2-months-2098447>

Government allows direct sale of bio-diesel by manufacturers

In a bid to augment supply of environment friendly fuel, the government has allowed private manufacturers of bio-diesel to sell it directly to consumers like Indian Railways.

Till now, only state-owned oil firms and only those private firms investing Rs 2,000 crore in oil infrastructure were allowed to retail petrol and diesel. Bio-diesel, which is to be doped in diesel

before being used to fire automobiles, too was clubbed under this rule.

The Union Cabinet has given approval for amending the Motor Spirit (petrol) and High Speed Diesel (diesel) control order for Regulation of Supply, Distribution and Prevention of Malpractices dated December 19, 2005.

<http://www.thehindu.com/news/national/govt-allows-direct-sale-of-biodiesel-by-manufacturers/article6793994.ece>

RTC to promote use of biodiesel to lower down fuel expenses

The state-run Andhra Pradesh State Road Transport Corporation (APSRTC) plans to operate buses using biodiesel on a large scale, owing to mounting fuel expenditure.

www.newindianexpress.com/cities/hyderabad/RTC-to-Promote-use-of-Biodiesel-to-Lower-Down-Fuel-Expenses/2015/02/18/article2674120.ece

Need to devise contingency plan for climate change: YS Chowdary

www.ibnlive.com/news/india/need-to-devise-contingency-plan-for-climate-change-ys-chowdary-1008061.html

Renewable energy heats up in India

A \$20 billion joint venture aimed at Indian renewable energy is the latest sign of fresh investment in the sector as PM Narendra Modi seeks to aggressively boost output.

SoftBank, Bharti Enterprises and Taiwan's Foxconn Technology recently announced the creation of a joint venture firm called SBG Cleantech to develop alternative energy plants across India.

www.cnbc.com/2015/06/29/renewable-energy-heats-up-in-india.html

Finance and Investment

Green Climate Fund to become operational soon

<http://www.thehindu.com/sci-tech/energy-and-environment/100billion-green-climate-fund-to-become-operational-in-india/article7371530.ece>

Climate & Environment Change

Mumbai Flooding: Climate change brings extreme weather to India

<http://www.telesurtv.net/english/news/Mumbai-Flooding-Climate-Change-Brings-Extreme-Weather-to-India-20150619-0029.html>

Global

Business & Market

Biomass boiler market is projected to reach USD 8,907.0 million by 2022 : Transparency Market Research

<http://globenewswire.com/news-release/2015/06/29/748097/10140019/en/Biomass-Boiler-Market-is-Projected-to-Reach-USD-8-907-0-Million-by-2022-Transparency-Market-Research.html>

Dong is upgrading Denmark's largest power plant to use wood pellets

Denmark is making good progress with its efforts to phase out conventional energy. The energy company Dong Energy has now announced that Denmark's largest power plant in Avedøre will be completely transitioned to wood pellets by 2016, making it the largest biomass power plant in the country.

All remaining units for district heating at the Avedøreværket power plant, which is located 10 km south of Copenhagen, will be completely converted to firing wood pellets. The power plant has an electrical capacity of 793 MW and a thermal capacity of 918 MW. Avedøreværket supplies approximately 200,000 households with district heating in the Copenhagen area. The power plant consists of two units: Avedøre 1 and Avedøre 2. Together they have a generation capacity of 825 MW. The Avedøre 1 block was built in 1990 and is mainly coal-fired. Avedøre 2 was built in 2001 and already utilises pellets as fuel in addition to both gas and oil. Dong Energy will now upgrade the entire Avedøreværket power plant to biomass fuel by 2016, making it possible to increasingly use wood pellets instead of coal and gas.

<http://www.sunwindenergy.com/dong-upgrading-denmarks-largest-power-plant-to-use-wood-pellets>

Wood pellet stoves drive heat in more houses in Western Pennsylvania

Last year, 2.5 million households across the country used wood, including pellets, as the main source of home heating, according to the Energy Information Administration. That's 24% more than the 1.9 million households in 2005. Nine million more households use wood as a secondary fuel.

Newer stove models have digital controls with Bluetooth capabilities that can connect to a cellphone and schedule pellets to burn in varying increments during the day. Pellets produce much less smoke than wood because of their low moisture content, industry experts say. The Northeast leads the country in pellet production for residential home heating and consumption, according to the EIA.

<http://triblive.com/business/headlines/8442716-74/pellets-wood-pellet>

Wood pellet dome inflated at Port of Wilmington

Enviva has inflated the first of two 17-story domes at the port. The domes will store 45,000 metric

tons of wood pellets once operational. The company says it took about three hours to inflate. A second dome will be inflated at the port in six weeks. The domes are part of Enviva's \$150 million investment in eastern North Carolina.

<http://www.wwaytv3.com/2015/06/15/wood-pellet-dome-inflated-at-port-of-wilmington/>

German Pellets has begun preparatory work for building a sawmill at the Woodville facility in Texas

<http://www.euwid-wood-products.com/news/roundwoodsawnwood/single/Artikel/german-pellets-begins-construction-of-sawmill.html>

Sunset Park neighborhood signs agreement with wood pellet company

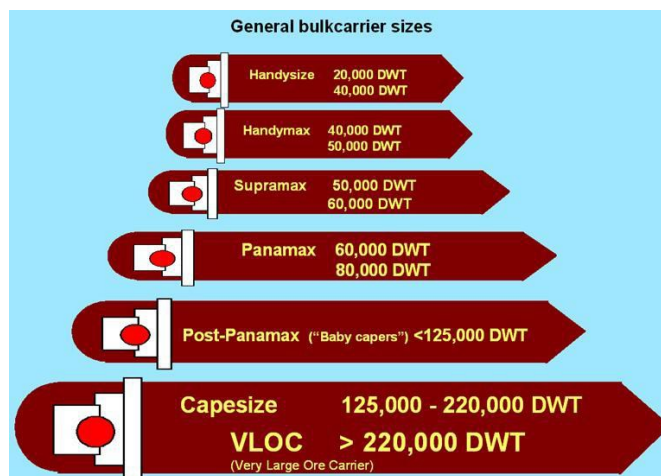
<http://www.wect.com/story/29264058/sunset-park-neighborhood-signs-agreement-with-wood-pellet-company>

Maxing out a Panamax: Canada's Pinnacle Pellet shared that it had successfully fully loaded a Panamax-class vessel with wood pellets

Canada's Pinnacle Pellet shared that it had successfully fully loaded a Panamax-class vessel with wood pellets.

It took place in June 2, at the company's Westview Terminal in Prince Rupert, B.C. Pinnacle says it will be the largest load of wood pellets ever shipped anywhere—in the history of the industry. Panamax vessels are purpose-built to utilize the maximum capacity of the Panama Canal. The vessel Pinnacle loaded will carry nearly 60,000 tons of wood pellets to Drax Power in the U.K.

Typically smaller vessels such as handysize/handimax or supramax vessels are commonly used to ship wood pellets, or, more recently and mainly from Canadian ports, partially-loaded Panamax.



Says Pinnacle, the larger load will allow receivers to improve discharge efficiency on arrival. The M/V Popi S was chartered by Grieg Star Shipping in Norway and will take 34 days to sail between Prince Rupert and Immingham, U.K., arriving in early July.

Today, Pinnacle manufactures 56 percent of Canada's total pellet production, and a seventh plant is in the works—construction began in late January. the \$42 million Westview terminal was built on the site of an abandoned grain terminal, and it's designed specifically to receive wood pellets transported by rail from Pinnacle's facilities for loading into bulk cargo vessels. It includes private

rail storage tracks, a wood pellet receiving and unloading building, a conveyor and ship loader system, and four silos with an expandable storage capacity of 50,000 metric tons. The terminal can unload rail cars at 1,000 metric tons per hour and has a vessel loading rate of 2,000 metric tons per hour.

<http://biomassmagazine.com/blog/article/2015/06/maxing-out-a-panamax>

\$200K spent on Roddickton wood pellet plant justified, says manager

The manager of a wood pellet plant on the Northern Peninsula says a 2014 government loan was necessary even though the plant didn't operate. Holson Forest Products owns the Roddickton plant, which was built in 2011 and was supposed to provide jobs for residents of the area. Four years later, the plant is still not producing pellets even though government loaned the operation nearly \$200,000 last year.

Manager Todd May says the money was needed to develop a new business plan and to pay for insurance. May said the company is still looking for a new partner, but there's no timetable on when the plant will go into production.

<http://www.cbc.ca/news/canada/newfoundland-labrador/200k-spent-on-roddickton-wood-pellet-plant-justified-says-manager-1.3095054>

Viridis Merchants announces European supply agreement

Viridis Energy Inc. recently announced that its wholly owned subsidiary, Viridis Merchants Inc., an aggregation and trading business, has secured a European supply agreement for up to 20,000 metric tons of ENplus certified premium wood pellets per year. VMI intends to distribute to the residential heating market throughout the U.K. and Europe. The agreement marks VMI's first European supply and is expected to generate over €4 million (\$4.51 million) per year.

The supply of certified pellets is marketed under the new Okanagan Nordics brand, which is the fourth brand in the Okanagan wood pellet family. VMI has already begun distributing the new brand to the residential heating market in the U.K. and plans to distribute to Italy and other European countries.

<http://www.biomassmagazine.com/articles/12058/viridis-merchants-announces-european-supply-agreement>

Drax appoints biomass expert

POWER PRODUCER Drax has appointed a former Government advisor to help explain the benefits of biomass.

Paul Hodgson joins Drax from the Department for Energy and Climate Change, where he worked as a special adviser, and will take up the newly created role of head of media relations. At DECC, he provided briefings to the Secretary of State and also the Deputy Prime Minister on green issues.

<http://www.yorkshirepost.co.uk/business/business-news/drax-appoints-biomass-expert-1-7305554>

Report: Advanced biofuel production likely to double in 3 years

North American advanced biofuel capacity topped 800 million gallons in 2014, up from the previous year and almost double the capacity in 2011, according to the E2 Advance Biofuel Market Report 2014 released by Environmental Entrepreneurs (E2), a national nonpartisan business group.

The report projects that by 2017, as many as 180 companies are expected to produce 1.7 billion gallons of advanced biofuel, doubling current capacity. It shows advanced biofuels are on track to meet targeted emission reductions for clean fuels standards in California and Oregon. "The advanced biofuel industry is meeting the growing demand for cleaner-burning transportation fuels," said co-author Mary Solecki, western states advocate for E2, an affiliate of the Natural Resources Defense Council.

<http://www.biodieselmagazine.com/articles/272813/report-advanced-biofuel-production-likely-to-double-in-3-years>

FEW panel optimistic on ethanol outlook, despite EPA rule

If the ethanol industry unites behind a common goal, "we will be undefeatable," Big River Resources CEO Ray Defenbaugh told the opening session at the International Fuel Ethanol Workshop underway in Minneapolis. The producer panel reinforced the theme of the first two speakers of the day who focused on Friday's announcement on the U.S. EPA's proposed renewable volume obligations for 2014, 2015 and 2016, which are considered to be "too little, too late," as panelist Paul Koehler, vice president of Pacific Ethanol said. "It's not what we need, it's not legal."

<http://www.ethanolproducer.com/articles/12314/few-panel-optimistic-on-ethanol-outlook-despite-epa-rule>

Alaska Airlines, WSU partner to advance use of biojet fuel

Washington state's hometown airline is teaming up with the Washington State University-led Northwest Advanced Renewables Alliance to advance the production and use of alternative jet fuel made from forest residuals, the tree limbs and branches that remain after a forest harvest. As the airline partner for NARA, Alaska Airlines intends next year to fly a demonstration flight using 1,000 gallons of alternative biofuel being produced by the NARA team and its many partners. The planned flight signals a growing interest in the aviation industry for a viable alternative to conventional fossil fuel.

NARA's focus is on developing alternative jet fuel derived from post-harvest forest residuals. Residual treetops and branches are often burned after timber harvest. By using these waste materials as the feedstock of a biojet fuel supply chain, NARA and its aviation industry partners, seek to reduce fossil fuel use and greenhouse gas emissions as well as bolster sustainable economic-development potential in timber-based rural communities located throughout the Pacific Northwest.

<http://www.biodieselmagazine.com/articles/410674/alaska-airlines-wsu-partner-to-advance-use-of-biojet-fuel>

Co-located supercritical biodiesel project changes hands

The Patriot Fuels Biodiesel project in Illinois, along with its much larger, co-located ethanol plant host, were bought by Cenex Harvest States

<http://www.biodieselmagazine.com/blog/article/2015/06/co-located-supercritical-biodiesel-project-changes-hands>

United Airlines buys \$30 mln stake Fulcrum BioEnergy

United Airlines purchased a \$30 million stake in alternative fuels developer Fulcrum BioEnergy Inc in a deal designed to meet part of its fuel needs and hedge against future oil price volatility and carbon regulations.

United Continental Holdings Inc said the agreement lets it purchase at least 90 million gallons of

sustainable aviation fuel for a minimum of 10 years, subject to availability, that is competitive with conventional jet fuel costs.

<http://af.reuters.com/article/energyOilNews/idAFL1N0ZG0F220150630>

Integrating biofuels and food crops on farms

In collaboration with the farming community of the Indian Creek Watershed in central Illinois, these researchers are finding ways to simultaneously meet three objectives: maximize a farmer's production, grow feedstock for bioenergy and protect the environment. These goals, as it turns out, are not necessarily mutually exclusive.

<http://www.rdmag.com/news/2015/07/integrating-biofuels-and-food-crops-farms>

Forest Practices Board to audit forestry activities of Pacific Bioenergy and RPP Holdings

www.lesprom.com/en/news/Forest_Practices_Board_to_audit_forestry_activities_of_Pacific_Bioenergy_and_RPP_Holdings_68280/

Iowa fuel tax savings kicks in for biodiesel blends July 1

Truckers, motorists and biodiesel producers alike will soon benefit from a tax savings in Iowa on one of the state's most beneficial products. As of July 1, diesel blended with at least 11% biodiesel (B11) will enjoy a tax exemption of 3 cents a gallon compared to regular diesel, a legislative victory celebrated by the Iowa Biodiesel Board and its supporters.

Signed by Gov. Terry Branstad in February, the law has already increased the state fuel tax by 10 cents a gallon for both diesel and gasoline to help improve Iowa's roads and bridges. Beginning July 1, biodiesel blends of B11 and above will receive a 3-cent exemption for five years.

www.biodieselmagazine.com/articles/429849/iowa-fuel-tax-savings-kicks-in-for-biodiesel-blends-july-1

Atlantic Biodiesel opens biodiesel plant in Ontario

The facility will produce 170 million litres of renewable, clean-burning biodiesel and 15 million litres of high-grade glycerin per year. The facility produces biofuel suitable for cold weather applications and is situated near infrastructure that provides storage as well as shipping to a range of North American markets. The Welland facility will bring approximately 25 local jobs and significant indirect business to the area.

<http://www.biofuelsdigest.com/bdigest/2015/06/27/atlantic-biodiesel-opens-biodiesel-plant-in-ontario/>

Decline in Argentina biodiesel exports accelerates

<http://www.argusmedia.com/News/Article?id=1058935>

Ontario biodiesel plant opens under new ownership

A biodiesel plant has opened under a new owner in Dain City, a suburb of Welland, Ontario. The plant changed hands after the former owner, Great Lakes Biodiesel LLC, went into financial receivership in 2014.

www.industrialinfo.com/news/abstract.jsp?newsitemID=248452

Big new tax puts the wind up biodiesel play

<http://www.theaustralian.com.au/business/opinion/big-new-tax-puts-the-wind-up->

[biodiesel-play/story-e6frg9lo-1227404744368](http://www.biodiesel-play/story-e6frg9lo-1227404744368)

Softwood felled in the UK for plant health reasons doubles

Felling of softwood trees in the UK under plant health legislation accounted for seven per cent of all softwood felling last year, according to latest figures from the Forestry Commission. The volume of timber felled for plant health reasons in 2014 amounted to 0.8 million green tonnes, more than twice the 2013 figure - 640,000 tonnes from Forestry Commission, Natural Resources Wales and Forestry Scotland plantations, and 170,000 tonnes from private land, despite public sector forest accounting for just 43 per cent of softwood harvested overall.

"Softwood removals required by plant health legislation are expected to consist mainly of Japanese larch that is suspected to be infected by *Phytophthora ramorum*," the commission's report said. In all there was a slight upturn in wood harvested and processed, with softwood harvestings up five per cent to 11.4 million tonnes and hardwood up one per cent to 532,000 tonnes.

The largest growth in use for UK timber was for wood pellets and briquettes, which rose 11 per cent to 335,000 tonnes and represents a 70 per cent increase since 2010. The import of wood pellets rose even more sharply, by 45 per cent to 10.7 million cubic metres, valued at £545m, even as UK pellet exports fell.

<http://www.hortweek.com/softwood-felled-uk-plant-health-reasons-doubles/plant-health/article/1348842>

Ensus in job cut talks as UK biofuels plant remains offline

Biofuels producer Ensus said on Friday that its bioethanol plant in northeast England remained offline and it was consulting staff about possible job cuts. The plant, one of the biggest in Europe, was closed temporarily in February because of adverse market conditions.

<http://www.euronews.com/business-newswires/3024702-ensus-in-job-cut-talks-as-uk-biofuels-plant-remains-offline/>

Global market research on biodiesel market development and demand forecast to 2020 shared in new report

The global biodiesel market is slated for a huge growth in the next few years, not only because of the growing environmental concerns, but also because of the surging prices for non-renewable sources of energy, such as petroleum. Governments are enhancing the use of biodiesel across the globe and many countries have initiated merging of conventional diesel with a percentage of biodiesel.

The development of alternative fuels is due to the limited availability and surging prices of petroleum products such as petrol, diesel and LPG. The major advantage of biodiesel is that it enhances the life of the engine, and unlike petroleum, it does not pollute the environment.

<http://www.whatech.com/market-research/green-technology/69462-global-market-research-on-biodiesel-market-development-and-demand-forecast-to-2020-shared-in-new-report>

St1 Biofuels Etanolix ethanol plant inaugurated in Sweden

The first Etanolix plant delivered to the international market by St1 Biofuels Oy was recently inaugurated in Gothenburg, Sweden. The plant delivered to North European Bio Tech Oy recycles feedstocks such as biowaste and process residue from local bakeries and bread from shops that is

past its sell-by date into ethanol for transport fuel. The ethanol plant is fully integrated into the functions and logistics of St1 oil refinery in Gothenburg and has an annual production capacity of 5 million liters (1.32 million gallons) of advanced bioethanol.

<http://www.ethanolproducer.com/articles/12330/st1-biofuels-etanolix-ethanol-plant-inaugurated-in-sweden>

AeroThermal, Jones Celtic BioEnergy to develop waste, clean energy projects

AeroThermal Group, which develops aerospace waste-to-energy projects, has partnered with Jones Celtic BioEnergy (JCBE) to develop projects in the waste and renewable energy field.

As per the Memorandum of Understanding, AeroThermal's autoclaves and expertise will be used in the waste treatment and biomass to energy market alongside JCBE, who in turn deploy anaerobic and aerobic biomass and waste technologies that will work well with AeroThermal's pre-treatment autoclave technology.

The partnership will be for two main purposes:

- Where a full new facility is required (e.g. a waste/biomass plant), JCBE would operate as the EPC contractor that will include for autoclave facility development and anaerobic digestion technologies.
- Where a retrofit of autoclaves to existing waste treatment operations is required, JCBE would again operate as the EPC contractor with AeroThermal operating again as the technology sub-contractor.

<http://www.environmentalleader.com/2015/06/17/aerothermal-jones-celtic-bioenergy-to-develop-waste-clean-energy-projects/>

AD biogas plant to be utilised in singapore

A new Anaerobic Digestion (AD) biogas demonstration plant is set to be the first of its kind in Singapore when it begins operations in September. The 2,000 sq metre Ulu Pandan Water Reclamation Plant will utilise the reaction between organic material in food waste, sludge in used water and bacteria to produce biogas electricity. Singapore's water plants already produce biogas using sludge, but it is expected that they can double the amount produced by adding food waste.

<http://circulatenews.org/2015/07/ad-biogas-plant-to-be-tested-in-singapore/>

ESADECREAPOLIS launches the first corporate car-sharing initiative in Spain based on renewable energy

Energy efficiency and its application as a user service are no longer a thing of the future. ESADECREAPOLIS, ESADE's innovation project accelerator, and Allia Renovables have launched the first pilot project in Spain that combines energy efficiency, renewable energy generation, and a shared mobility service via a fleet of electric cars. The project could reduce CO2 emissions by 80 tonnes a year.

<http://timesofindia.indiatimes.com/home/environment/global-warming/ESADECREAPOLIS-launches-the-first-corporate-car-sharing-initiative-in-Spain-based-on-renewable-energy/articleshow/48003185.cms>

Groups related to the biomass industry band together to challenge press coverage

Frustrated by what they see as skewed news coverage of biomass, a coalition of forest industry groups is attacking media outlets, charging that reporters are giving free rein to environmentalists' critiques of wood-fired power generation while ignoring evidence that the cultivation, harvest and burning of trees and wood waste to generate electricity does not exacerbate climate warming.

<http://www.eenews.net/stories/1060020195>

Green light for £65mn Barnsley waste wood to energy plant

Peel Environmental's plans to develop a £65 million waste wood gasification facility on a former coal mine in Yorkshire have been given planning permission by Barnsley metropolitan borough council.

<http://www.letsrecycle.com/news/latest-news/green-light-for-65m-barnsley-waste-wood-energy-plant/>

States eligible for \$100mn in USDA biofuel infrastructure grants

Following an announcement by USDA Secretary Tom Vilsack on May 29, the Commodity Credit Corporation announced June 12 that all 50 states, the Commonwealth of Puerto Rico and Washington, D.C., may now apply for up to \$100 million in grants under the Biofuels Infrastructure Partnership. The funding is to support the infrastructure needed to make more renewable fuel options available to American consumers. The Farm Service Agency will administer BIP.

<http://www.biodieselmagazine.com/articles/421788/states-eligible-for-100m-in-usda-biofuel-infrastructure-grants>

Biodiesel industry looks to grow

Officials in the biodiesel industry are optimistic the latest guidelines from the EPA for the Renewable Fuel Standard will help the industry grow going forward, although they would like to see the 2016 and 2017 volumes raised.

http://www.iowafarmertoday.com/news/crop/biodiesel-industry-looks-to-grow/article_125da456-0f8b-11e5-9c38-4bc89a5c8ebc.html

Biofuels Association of Australia (BAA) hails bipartisan approach on the taxation of biodiesel and ethanol produced

In Australia, the Biofuels Association of Australia said an agreement on biofuels will see the excise rate payable on biodiesel phased in equal increments over the next 16 years, beginning at 0% in 2015-16 and increasing to 50% of the diesel excise rate in 2030-31.

CEO of the BAA, Gavin Hughes, said the deal will now allow the industry to focus on the longer term and provides a sustainable footing for the biofuels industry to grow and delivers on the government objective of moving biofuels into the excise framework.

"Without this agreement, the domestic biodiesel industry faced the very real possibility of forced

closure by 2018. Now, Australian biodiesel producers are able to take a long term view and plan their growth. Momentum for the use of biofuels as an alternative to petrol and diesel is starting to shift once again around the country with the Queensland government planning to join NSW in mandating ethanol and biodiesel. Governments at all levels recognise the role that increased use of biofuels can have on creating the next generation of jobs, improving health outcomes through reducing harmful emissions, assisting in decarbonising our liquid fuels and reducing our reliance on imported fuels." Mr Hughes said.

<http://www.biofuelsdigest.com/bdigest/2015/06/21/biofuels-association-of-australia-hails-bipartisan-approach-on-the-taxation-of-biodiesel-and-ethanol-produced/>

Government ignores heat opportunities for addressing climate change

The UK Bioenergy Association says it is disappointed that the Government's climate change targets focus mainly on emissions reduction opportunities in agriculture and greater use of electric cars, with no mention of the potential of the heat sector.

Association Chair Rob Mallinson says the Government has already run a Wood Energy Scheme that showed the cost of carbon emission reduction from renewable heat opportunities was only around \$7 per tonne.

"Buying carbon credits offshore will only meet our obligation for one 'commitment period' and the long-term cost of this approach hasn't been properly assessed. We should be taking advantage of low-cost opportunities to reduce our carbon emissions here in New Zealand by increasing our use of bioenergy, particularly in the heat sector.

"The Bioenergy Association would like to see the Government explore these opportunities, as have the UK with its Renewable Heat Incentive, and Australia with its \$2 billion Emissions Reduction Fund."

www.scoop.co.nz/stories/SC1507/S00022/heat-opportunities-for-addressing-climate-change-ignored.htm

Asia takes the lead on sustainable energy but many still have none

www.eco-business.com/opinion/asia-takes-the-lead-on-sustainable-energy-but-many-still-have-none/

Finance & Investment

Funds offered for conversion to wood-pellet heat

The Adirondack Model Neighborhood Wood Heat Initiative, a program of the Northern Forest Center, will provide financial incentives for wood-pellet boiler installations to 20 homeowners living in Saranac, Saranac Lake and Tupper Lake.

It will also provide funds to help install 15 wood-pellet boilers in municipal and non-residential buildings in Essex, Franklin and Clinton counties, with preference given to projects in Saranac, Saranac Lake and Tupper Lake.

http://www.pressrepublican.com/news/environment/funds-offered-for-conversion-to-wood-pellet-heat/article_d5cf82f7-a2fd-5a2d-adb0-a98196eb7a07.html

N.Y. funds biotech accelerator, along with pellet and AD projects

On June 1, New York Gov. Andrew Cuomo announced funding for the Central New York Biotech Accelerator. Separate initiatives announced by the New York State Energy Research and Development Authority on May 28 will support two pellet projects and an anaerobic digestion (AD) system.

Funding for the Central New York Biotech Accelerator was approved by the Empire State Board of Directors as part of \$181 million in economic development assistance for 24 projects that aim to spur growth and opportunity within the state. The biotech accelerator, located in Onondaga County, was awarded \$500,000.

The AD project, located in the Lake Placid area, will include the installation of a small-scale waste bio-digester that converts food waste into biogas used to generate electricity. NYSERDA estimates schools, restaurants and businesses in the region will divert 900 tons of food waste from the landfill annually, saving the town \$68,000 per year and creating enough power for 27 homes.

One of the two pellet projects is located in Stockholm and will convert the town garage heating system from oil to high-efficiency, low-emission wood pellets. Under the second pellet project, the Northern Forest Center will work with communities across the North Country to promote conversions to wood pellets.

<http://biomassmagazine.com/articles/12011/n-y-funds-biotech-accelerator-along-with-pellet-and-ad-projects>

Danforth center receives \$8mn for bioenergy program

The Donald Danforth Plant Science Center awarded an \$8mn grant from the U.S. Department of Energy ARPA—E TERRA program. Funds will be used for research to accelerate breeding and the commercial release of economically viable bioenergy sorghum hybrids.

<http://feedstuffs.com/story-danforth-center-receives-8m-bioenergy-program-45-128982>

DOE announces intent to fund innovative bioenergy technologies

The U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy has announced its intent to issue a funding opportunity announcement (FOA) targeting innovative technologies and solutions to help advance bioenergy development. The FOA will be issued on behalf of the Bioenergy Technologies Office.

The FOA will specifically seek to support project that facilitate BETO's goals related to the research and development of algae biofuels, feedstock supply and logistics, and conversion technologies.

<http://www.ethanolproducer.com/articles/12391/doe-announces-intent-to-fund-innovative-bioenergy-technologies>

Research & Development

Study: Increasing wood pellet demand boosts forest growth, reduces GHGs, creates jobs

An industry that can reduce greenhouse gas emissions, increase forest growth, and create jobs sounds too good to be true. But that is the reality of the emerging wood pellets market in the

Southern U.S. That conclusion is supported by independent economic assessments of wood bioenergy, including a recent study that specifically focused on European pellet demand conducted by researchers at Duke and North Carolina State Universities. Those researchers found that increasing demand for wood pellets resulted in more forest area, more forest investment, large greenhouse gas reductions, and little change in forest carbon inventories.

<http://blogs.usda.gov/2015/06/08/study-finds-increasing-wood-pellet-demand-boosts-forest-growth-reduces-greenhouse-gas-emissions-creates-jobs/>

City utility to test non-wood pellets this summer

Columbia Water and Light, the city's municipal utility, has had its own experiences with burning biomass pellets to generate power, though the pellets weren't made of wood. The utility plans to test pellets again in a power plant boiler later this summer, said Water and Light spokeswoman Connie Kacprowicz, after the Missouri Department of Natural Resources approves a temporary permit.

Water and Light will burn "eCARB" biofuel pellets from Mexico, Mo.-based Enginuity Worldwide, which are designed to be mixed with coal and burned in traditional power plants. The pellets are made from "non-woody, annually renewable, home-grown" materials such as corn stover, according to Enginuity's website.

http://www.columbiatribune.com/news/perspectives/city-utility-to-test-non-wood-pellets-this-summer/article_dbf3b3f2-2dab-5009-95b0-269ec9446b94.html

Company with plans for wood pellet terminal to study best trees to burn for electricity

A company interested in building a wood pellet export terminal in Charleston and a pellet mill near Winnsboro will spend \$3.8 million to research the types of trees that can be burned for electricity production.

Abengoa Energy Crops, whose proposal for the terminal is under fire from environmentalists, revealed the research plan in a joint announcement Wednesday with Clemson University. The research will, among other things, look at developing certain trees as feedstock for biomass plants

<http://www.thestate.com/news/business/article23057079.html>

Unlocking the biofuel energy stored in plant cell walls

We are experts at using the structural parts of plants to make things -- wood for buildings and furniture, flax and cotton for clothing -- but when it comes to using them for energy, we haven't progressed much beyond the Neanderthal stage: We burn them.

<http://news.psu.edu/story/359962/2015/06/09/research/unlocking-biofuel-energy-stored-plant-cell-walls>

Researchers study benefits of double-cropping camelina, soybeans

In the U.S., federal mandates to produce more renewable fuels, especially biofuels, have led to a growing debate: Should fuel or food grow on arable land? Recent research shows farmers can successfully, and sustainably, grow both.

<http://www.biodieselmagazine.com/articles/406430/researchers-study-benefits-of-double-cropping-camelina-soybeans>

BESC, Mascoma develop revolutionary yeast for biofuel production

Biofuels pioneer Mascoma LLC and the Department of Energy's BioEnergy Science Center have developed a revolutionary strain of yeast that could help significantly accelerate the development of biofuels from nonfood plant matter.

<http://www.ethanolproducer.com/articles/12320/besc-mascoma-develop-revolutionary-yeast-for-biofuel-production>

Smithfield Foods' hog production division and Tyton BioEnergy Systems announce research partnership

Smithfield Foods' Hog Production Division, Murphy-Brown LLC, and Tyton BioEnergy Systems announced a research partnership to develop new applications for Tyton's dedicated, non-smoking tobacco crop and the resulting soil amendment, filtration and feed products within Smithfield's hog production processes. The companies are pursuing mutual goals of protecting the environment while improving economic efficiency through this collaboration.

The two companies are establishing field trials with non-smoking tobacco using hog manure as fertilizer. High absorption rates of hog fertilizer by non-smoking tobacco would enhance environmental outcomes and assist Tyton in obtaining lower-cost fertilizer for its industrial crop. In addition, the companies are pursuing the development of ethanol products using tobacco as raw material rather than corn.

Smithfield and Tyton will also develop applications for Tyton's tobacco-based biochar and activated carbon products, which can be used for a wide-range of filtration, land remediation and soil amendment purposes. Other research activities with Tyton co-products will occur in parallel.

<http://nationalhogfarmer.com/smithfield-foods-hog-production-division-and-tyton-bioenergy-systems-announce-research-partnership>

WIS Group develops bio-energy solution

WIS Group is Northern Ireland's largest process control, automation, instrumentation and environmental engineering company. With a strong track record over the past 30 years in the water / wastewater treatment and aerospace sectors, WIS groups expansion into the bioenergy market has been a huge success with a range of processes including large industrial and farm scale anaerobic digestion plants.

These plants range in size from just 75kWe to 5 MWe.

www.farminglife.com/news/farming-news/wis-group-develops-bio-energy-solution-1-6820351

Bioenergy crops emit too many volatile organic compounds: Research

Energy crops used as alternatives to fossil fuels can, in some cases, emit harmful levels of volatile organic compounds (VOCs), leading to increased fine particulate matter in the atmosphere and surface ozone. That's the finding of US scientists, who suggest these emissions could be minimized by selecting different crops.

<http://environmentalresearchweb.org/cws/article/news/61600>

State officials expand burn bans; governor urges forgoing fireworks

Fearing a bad wildfire season, state officials have expanded their burn ban to include all state parks and forests. Gov. Jay Inslee is also urging people to limit their use of fireworks or forgo fireworks completely for Fourth of July celebrations.

State officials have upgraded the existing burn precautions because of the extraordinary heat and drought conditions across the state — and because of forecasts for more of the same.

The emergency proclamation by Gov. Jay Inslee and Commissioner of Public Lands Peter Goldmark extends to all 39 counties, activating resources needed to prevent and contain expected wildfires.

www.seattletimes.com/seattle-news/northwest/state-expands-burn-bans-governor-urges-forgoing-fireworks/